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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/659,419	09/10/2003	Toshio Mikiya	10210/8	4624

7590 03/07/2005

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EXAMINER

TALBOT, MICHAEL

ART UNIT	PAPER NUMBER
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3722

DATE MAILED: 03/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/659,419

Applicant(s)

MIKIYA ET AL.

Examiner

Michael W Talbot

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-9 and 11-19 is/are rejected.
- 7) ☒ Claim(s) 6 and 10 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Oath/Declaration

1. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because it incorrectly references the filing date for claimed foreign priority application 2003-270270 as 2/7/2003. The correct filing date is 7/2/2003.

Specification

2. The disclosure is objected to because of the following informalities:

Refer to preliminary amendment filed 15 February 2003, page 2, line 27, the word "shat" should be changed to --shaft--.

Refer to preliminary amendment filed 15 February 2003, page 3, line 6, the character reference "proximal rotary gear 22" should be changed to --proximal rotary shaft 22--.

Refer to preliminary amendment filed 15 February 2003, page 3, line 16, the two occurrences of character reference "spur gear 17e" should be changed to --spur gear 17d--.

Refer to page 9, line 14, the Figure references of "Figs. 4 and 5" should be changed to --Figs. 4a and 4b—as there is no submitted Figure 5.

Appropriate correction is required.

Claim Objections

3. Claim 6 is objected to because of the following informalities:

Refer to line 10 of claim 6, the term "fastening bold" should be changed to --fastening bolt--.

Refer to line 10 of claim 12, one of the two occurrences of the term "first spur gear" should be changed to --second spur gear--.

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Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 16-19 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

With regards to claim 16, the drawings in conjunction with the specification (page 9, paragraph 49) do not provide a clear description as to the claimed limitation of the phrase "said body being movable in parallel with said axis". The drawings and/or the specification must be revised without the addition of new matter to provide a more accurate disclosure of the claimed limitation.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 12-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is unclear as to the claimed limitation of the phrase "to enable said first spur gear to keep engagement with said first spur gear". For examination purposes, the phrase has been interpreted as "to enable said second spur gear to keep engagement with said first spur gear". If our interpretation is incorrect, please provide a more clear description of the claimed limitation.

Claim Rejections - 35 USC § 102

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6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Uehlein-Proctor '633. Uehlein-Proctor '633 shows in Figures 1-3 a rotary cutting apparatus (10) having a magnetic base (18 and col. 3, lines 18-20), a body (14), a motor (30), a rotary shaft assembly (34 and col. 3, line 46 through col. 4, line 18) comprising of a proximal rotary shaft (54) with an axis of rotation (38), an intermediate rotary shaft (74) concentric with axis and telescopically connected to proximal rotary shaft and a distal rotary shaft (90) concentric with axis and telescopically connected to intermediate rotary shaft, a cylindrical housing (106) concentric and movable along axis together with distal rotary shaft and a feed mechanism (122) having a drive member (130) engaged with cylindrical housing (col. 5, lines 6-11).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uehlein-Proctor '633 in view of Shotter '570. Uehlein-Proctor '633 lacks a double track mechanism comprising a first rack, a second rack and a drive pinion positioned between racks. Shotter '570 shows in Figure 18 a first rack (172) a second rack (173) and a drive pinion (180) spaced between (col. 8, lines 12-14). In view of this teaching of Shotter '570, it is considered to have

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been obvious to replace the rack and pinion assembly of Uehlein-Proctor '633 with another well-known drill rack and pinion assembly shown in Shotter '570.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Uehlein-Proctor '633 in view of Shotter '570 as applied to claims 1 and 2 above, and further in view of Gill '123. Uehlein-Proctor '633 in view of Shotter '570 lacks the motor output shaft extending normal to the rotary shaft assembly axis. Gill '123 shows in Figure 2 and describes in col. 1, lines 59-67 a motor axis (B) being normal to the rotary shaft assembly axis (A). In view of this teaching of Gill '123, it is considered to have been obvious to locate the motor shaft with respect to the rotary shaft assembly to a normal orientation since this combination would directly result in an increase in power of the drill.

Claims 4 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uehlein-Proctor '633 in view of Shotter '570 in view of Gill '123 as applied to claims 1-3 above, and further in view of Rydell '558. Uehlein-Proctor '633 in view of Shotter '570 in view of Gill '123 lacks the magnetic base being movable in a plane normal to the rotary shaft assembly. Rydell '558 shows in Figure 2 and describes in col. 1, lines 40-60 a longitudinal movable base (13,15) normal to the rotary shaft assembly. In view of this teaching of Rydell '558, it is considered to have been obvious to modify the magnetic base to include a movable part to enhance alignment of the drill tool with respect to the workpiece and to allow for an increased number of drilling operations per setting of the magnetic base in a linear direction.

Claims 5 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uehlein-Proctor '633 in view of Shotter '570 in view of Gill '123 in view of Rydell '558 as applied to claims 1-4 above, and further in view of Williamson, Jr. '910. Uehlein-Proctor '633 in view of Shotter '570 in view of Gill '123 in view of Rydell '558 lacks the magnetic base having a pivot member to allow rotational movement of the drill about the pivot member and a fastener to fix

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the drill at a desired angular position. Williamson, Jr. '910 shows in Figures 1-4 and describes in col. 3, lines 11-24 a magnetic base (12) having rotatable sections (14,16) to achieve a desired angle and fixed in location by a locking bolt (116). In view of this teaching of Williamson, Jr. '910, it is considered to have been obvious to modify the magnetic base to include a rotatable-sectioned base to enhance alignment of the drill tool with respect to the workpiece and to allow for an increased number of drilling operations per setting of the magnetic base in an angular direction.

Claims 11 and 12 are rejected under 35 U.S.C. 102(a) as being unpatentable over Uehlein-Proctor '633 in view of Shotter '570 as applied to claims 1 and 2 above, and further in view of Lawler '927. Uehlein-Proctor '633 in view of Shotter '570 lacks an axially movable proximal rotary shaft and a gear train located between the motor and distal rotary shaft. Lawler '927 shows in Figure 2 and describes in col. 3, lines 30-52 an axially movable proximal shaft (14') with a gear train comprising a first gear (42) secured to proximal shaft and a second elongated gear (40) to maintain engagement between the first and second gears during movement of the proximal shaft. In view of this teaching of Lawler '927, it is considered to have been obvious to replace the gear train assembly with another well-known gear train assembly to promote additional rotary shaft travel along its axis of rotation.

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Uehlein-Proctor '633 in view of Shotter '570 in view of Screen '704 as applied to claims 11 and 12 above, and further in view of Gill '123 and Rydell '558. Uehlein-Proctor '633 in view of Shotter '570 in view of Screen '704 lacks the motor output shaft extending normal to the rotary shaft assembly axis and the magnetic base being movable in a plane normal to the rotary shaft assembly. Gill '123 shows in Figure 2 and describes in col. 1, lines 59-67 a motor axis (B) being normal to the rotary shaft assembly axis (A). In view of this teaching of Gill '123, it is considered to have been

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obvious to locate the motor shaft with respect to the rotary shaft assembly to a normal orientation since this combination would directly result in an increase in power of the drill. Rydell '558 shows in Figure 2 and describes in col. 1, lines 40-60 a longitudinal movable base (13,15) normal to the rotary shaft assembly. In view of this teaching of Rydell '558, it is considered to have been obvious to modify the magnetic base to include a movable part to enhance alignment of the drill tool with respect to the workpiece and to allow for an increased number of drilling operations per setting of the magnetic base in a linear direction.

Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Uehlein-Proctor '633 in view of Shotter '570 in view of Screen '704 in view of Gill '123 in view of Rydell '558 as applied to claim 13 above, and further in view of Williamson, Jr. '910. Uehlein-Proctor '633 in view of Shotter '570 in view of Gill '123 in view of Rydell '558 lacks the magnetic base having a pivot member to allow rotational movement of the drill about the pivot member and a fastener to fix the drill at a desired angular position. Williamson, Jr. '910 shows in Figures 1-4 and described in col. 3, lines 11-24 a magnetic base (12) having rotatable sections (14,16) to achieve a desired angle and fixed in location by a locking bolt (116). In view of this teaching of Williamson, Jr. '910, it is considered to have been obvious to modify the magnetic base to include a rotatable-sectioned base to enhance alignment of the drill tool with respect to the workpiece and to allow for an increased number of drilling operations per setting of the magnetic base in an angular direction.

Allowable Subject Matter

8. Claims 6 and 10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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9. Claims 15 and 19 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

10. Any inquiry concerning the content of this communication from the examiner should be directed to Michael W. Talbot, whose telephone number is 571-272-4481. The examiner's office hours are typically 8:30am until 5:00pm, Monday through Friday. The examiner's supervisor, Mr. Derris Banks, may be reached at 571-272-4419.

In order to reduce pendency and avoid potential delays, Group 3720 is encouraging FAXing of responses to Office Actions directly into the Group at FAX number 703-872-9306. This practice may be used for filing papers not requiring a fee. It may also be used for filing papers, which require a fee, by applicants who authorize charges to a USPTO deposit account. Please identify Examiner Michael W. Talbot of Art Unit 3722 at the top of your cover sheet.



Michael W. Talbot
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Art Unit 3722



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